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Fortin et al.(10) **Pub. No.: US 2014/0075126 A1**(43) **Pub. Date: Mar. 13, 2014**(54) **MANAGEMENT OF EXTERNAL MEMORY
FUNCTIONING AS VIRTUAL CACHE****Publication Classification**(71) Applicant: **Microsoft Corporation**, Redmond, WA
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(57)

ABSTRACT

A method and apparatus for managing the caching of data on an auxiliary memory of a computer. Pages of data may be cached on an auxiliary memory, such as a flash memory, at a virtual level using an identifier that does not involve a physical address of the pages on a memory. Pages may be cached on auxiliary memory that may be removable from the computer, e.g., by unplugging the memory from the computer. Page data may be encrypted and/or compressed on the auxiliary memory. An authentication indicator may be used to verify the accuracy of cached data in the case of an interrupted connection to the auxiliary memory, e.g., as a result of computer power down, hibernation, removal of the memory from the computer, etc.

